Application No.: 10/575,710 Amendment dated June 23, 2010

Reply to Office Action of May 06, 2010

**AMENDMENTS TO THE CLAIMS** 

1. (Currently Amended) A method for performing aggregate-portion-specific flow shaping in a

packet-switched telecommunication system comprising at least one buffer memory and a

multiplexer, the method comprising:

- transferring digital information as constant or variable-length packets to the at least one buffer

memory as at least two separate traffic flows, the traffic flows forming an aggregate flow,

- defining at least two shaping groups, each shaping group being a portion of the aggregate flow

and including at least one of the traffic flows, and wherein at least one of the shaping groups

including includes at least two of the traffic flows,

- setting restrictions of speed properties for the at least two shaping groups,

- defining an earliest permitted moment, at which a packet can be forwarded by the multiplexer,

as a greatest value of Valid Time to Send -values of the at least two shaping groups to which a

traffic flow represented by the packet to be forwarded belongs, and

- as a result of forwarding the packet, updating the Valid Time to Send -values of the same

shaping groups to which the forwarded packet belongs, a Valid Time to Send -value of each

shaping group expressing an earliest permitted moment at which a packet belonging to that

shaping group can be forwarded without breaking restrictions of speed properties of that shaping

group.

2. (Previously Presented) A method according to Claim 1, wherein all traffic flows contained in

a first shaping group are also included in a second shaping group.

3. (Currently Amended) A system for performing aggregate-portion-specific flow shaping in

packet-switched telecommunications, the system comprising:

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- means for receiving constant or variable-length packets carrying digital information;

- a controller configured to:

- classify a packet arriving in the system as representing one of traffic flows arriving in

the system, the traffic flows forming an aggregate flow,

- define at least two shaping groups, each shaping group being a portion of the aggregate

flow and including at least one of the traffic flows, and wherein at least one of the shaping

groups includes at least two of the traffic flows, and

- set restrictions of speed properties for the at least two shaping groups; and

- means for forwarding the packets to an outgoing link or links,

wherein the controller is further configured to:

- define an earliest permitted moment, at which a packet can be forwarded, as a greatest

value of Valid Time to Send -values of the at least two shaping groups, to which a traffic flow

represented by the packet to be forwarded belongs, and

- update, as a response to forwarding the packet, the Valid Time to Send -values of the

same shaping groups to which the forwarded packet belongs, a Valid Time to Send -value of

each shaping group expressing an earliest permitted moment, at which a packet under that

shaping group can be forwarded without breaking restrictions of speed properties of that shaping

group.

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4. (Previously Presented) The system according to Claim 3, wherein the controller is further configured to define all traffic flows contained in a first shaping group to belong also to a second shaping group.